

MUNICIPAL VULNERABILITY PREPAREDNESS (MVP) PROGRAM

Public Listening Session

Boylston, MA

May 23, 2022

6:30 PM



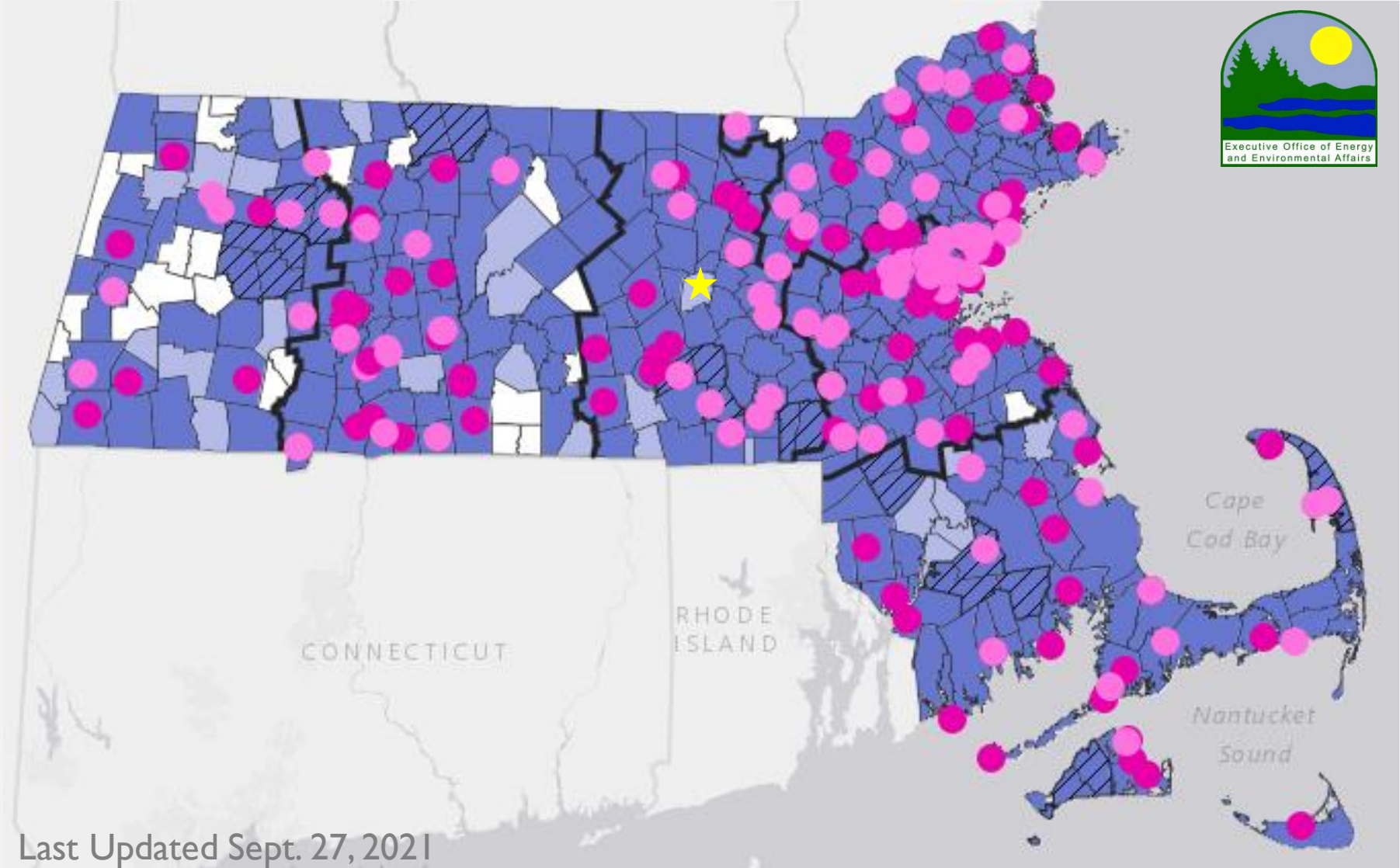
MUNICIPAL VULNERABILITY PREPAREDNESS (MVP)

- State grant program to support cities and towns to begin the process of planning for climate resiliency.
- MVP Planning Process includes CRB Workshop, Report, Listening Session, and Annual Reporting
- Communities who complete the MVP Planning Process become certified as an MVP Community
- Designated communities become eligible for MVP Action Grant funding



Municipal Vulnerability Preparedness (MVP) Grant Programs

Planning Grants and Action Grants



Legend

MVP Action Grants

Completed

In-progress

MVP_region_boundaries

MVP regional partnerships

MVP Planning Grant municipalities

Achieved MVP designation

In-progress

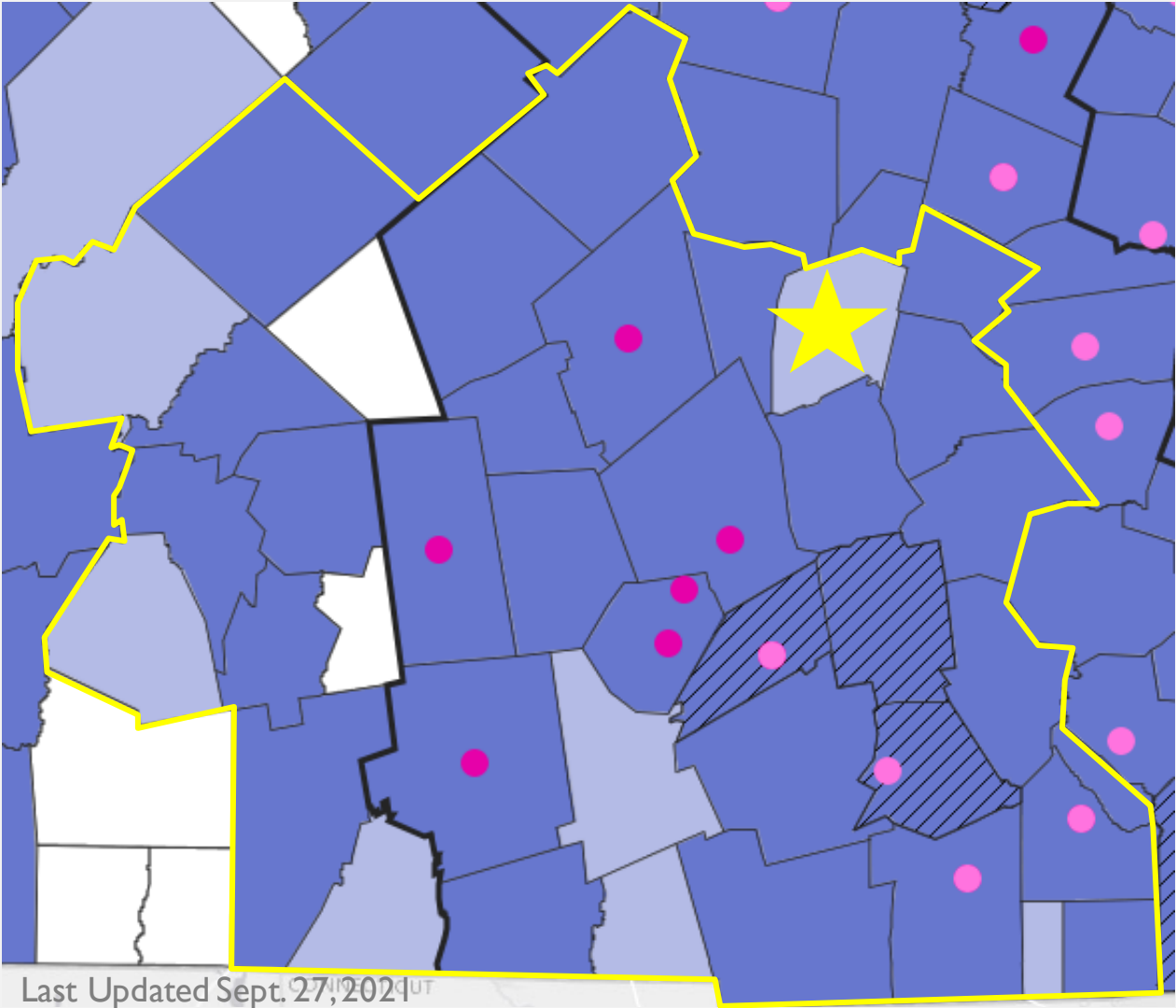


Last Updated Sept. 27, 2021

Source: Massachusetts Executive Office of Energy and Environmental Affairs beta Climate Grant Viewer

Municipal Vulnerability Preparedness (MVP) Grant Programs

Central Massachusetts Planning Grants and Action Grants



Legend

MVP Action Grants

- Completed
- In-progress

MVP_region_boundaries

CMRPC region boundary

MVP regional partnerships

MVP Planning Grant municipalities

- Achieved MVP designation
- In-progress

**MVP Program Manager
for Central Region:**
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Hillary.king@mass.gov



COMMUNITY RESILIENCE BUILDING (CRB) PROCESS

- Community-driven process led by the project coordinators (April Steward and Paul Dell'Aquila) and Core Team members
- Boylston's 8-member Core Team met 5 times in January, February, and March
- Invitation-only workshop was held virtually on March 30th and hybrid on April 6th
- 25 attendees, including local officials, board and committee members, business, schools and non-profit groups
- Listening session (today) is open to the public

CRB WORKSHOP OBJECTIVES

- Define extreme weather and climate-related hazards
- Identify current and future vulnerabilities and strengths
- Develop and prioritize actions for the community and broader stakeholder networks, and
- Identify opportunities for the community to advance actions to reduce risks and build resilience

PRIMARY TOPIC AREAS



- Infrastructure



- Society



- Environment

STEP ONE: IDENTIFY TOP 4 HAZARDS

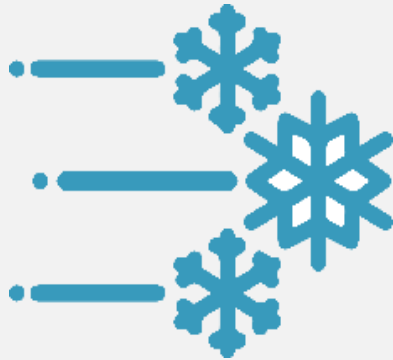
DROUGHT/EXTREME HEAT
(WILDFIRES & INVASIVES)



FLOODING
(INLAND & COASTAL)



WINTER STORMS
(SNOW & ICE)

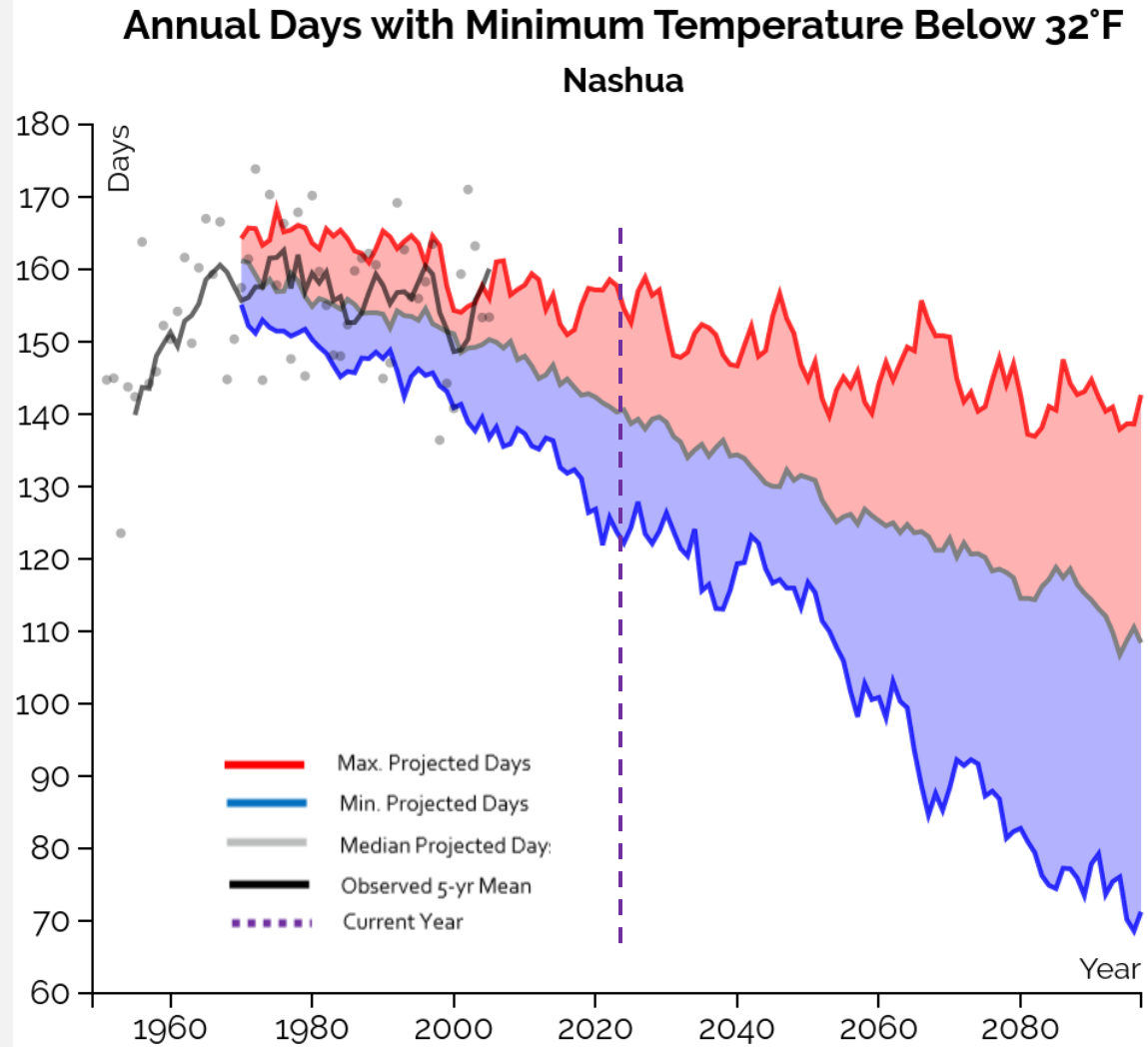


SEVERE STORMS
(WIND & TORNADO)



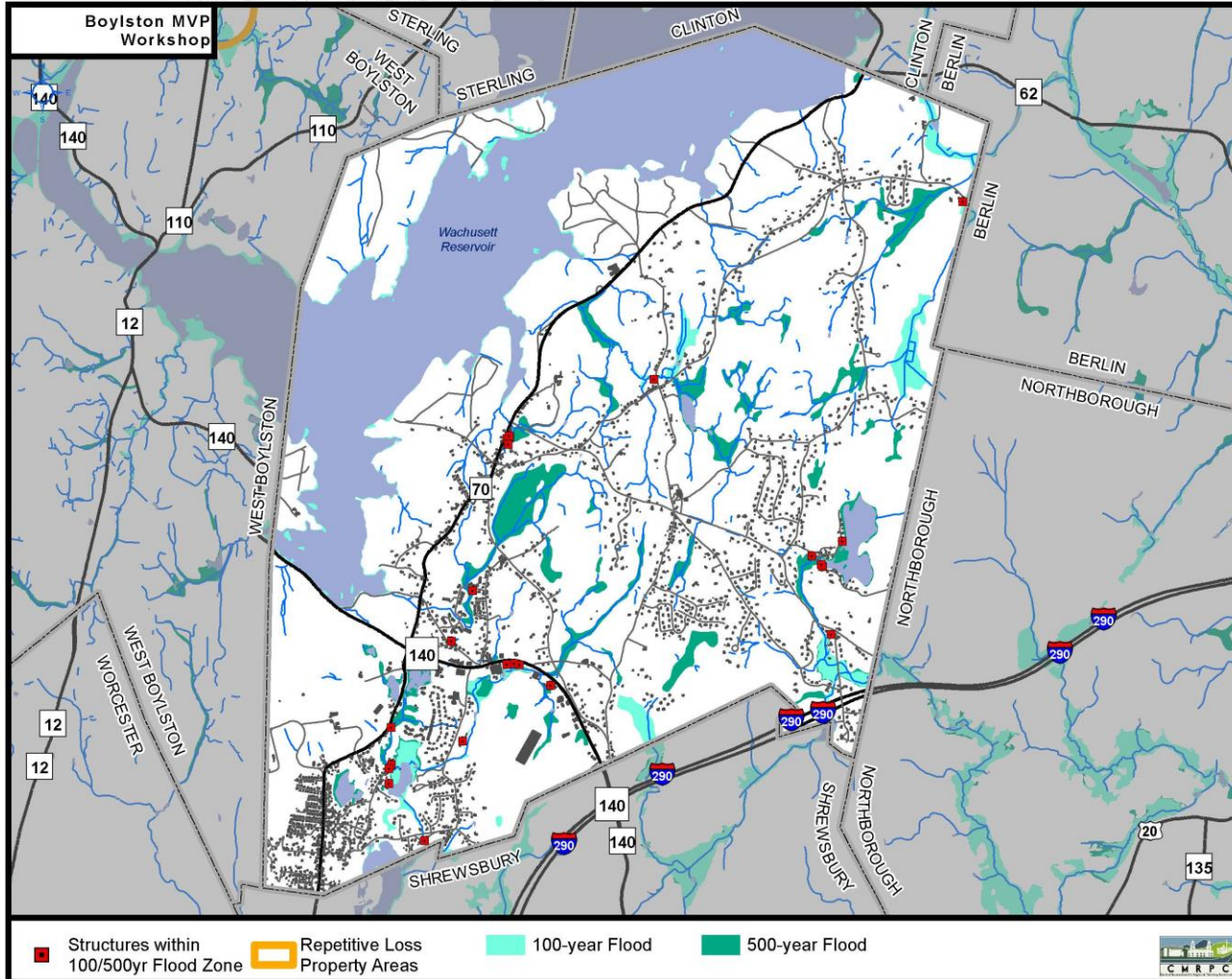
WINTER STORMS

- Annual days below freezing will decrease
- Rising temps → more winter precipitation to fall as rain or freezing rain
- Lower snowfall accumulation
- Winter - Highest projected increase in precipitation
- Storms that do occur may be worse
 - proximity to Atlantic Ocean increases risk of large storm events

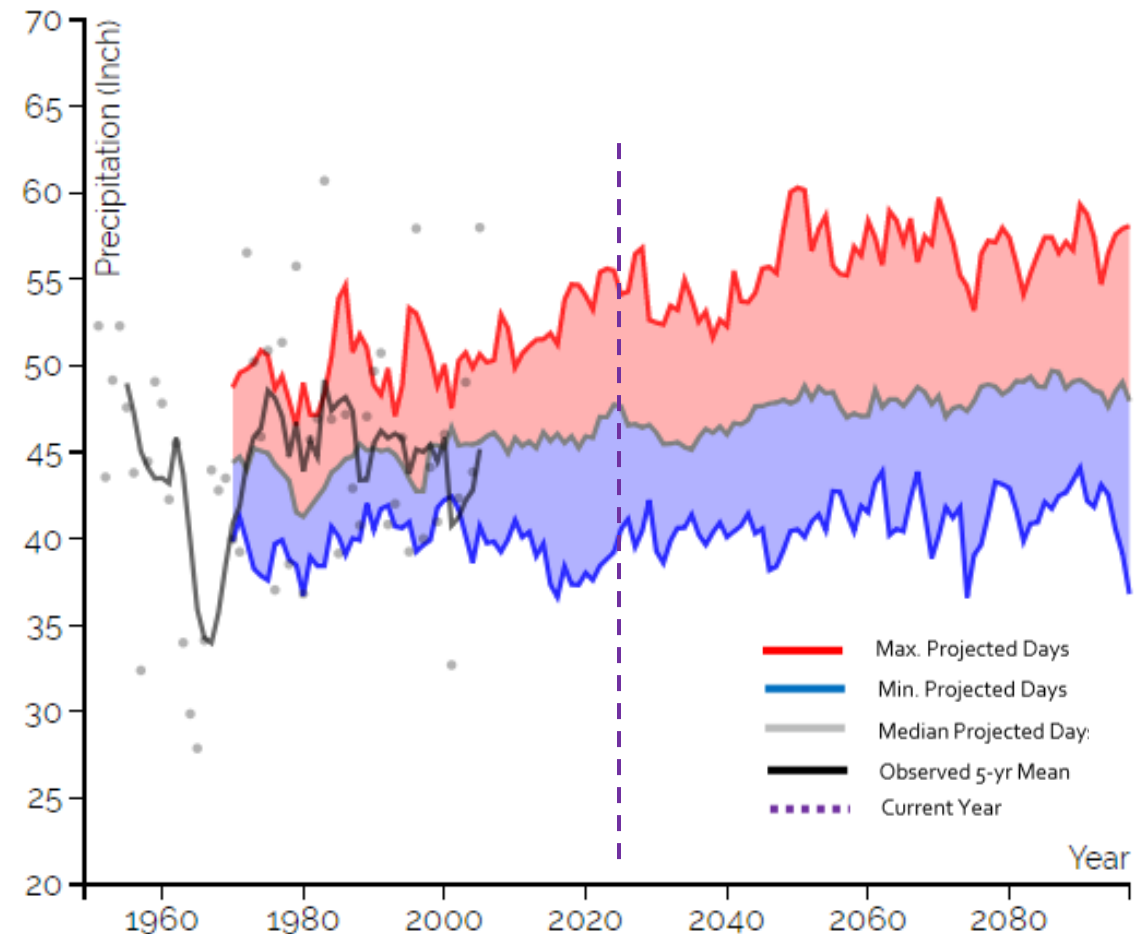


HEAVY RAINFALL AND FLOODING IMPACTS

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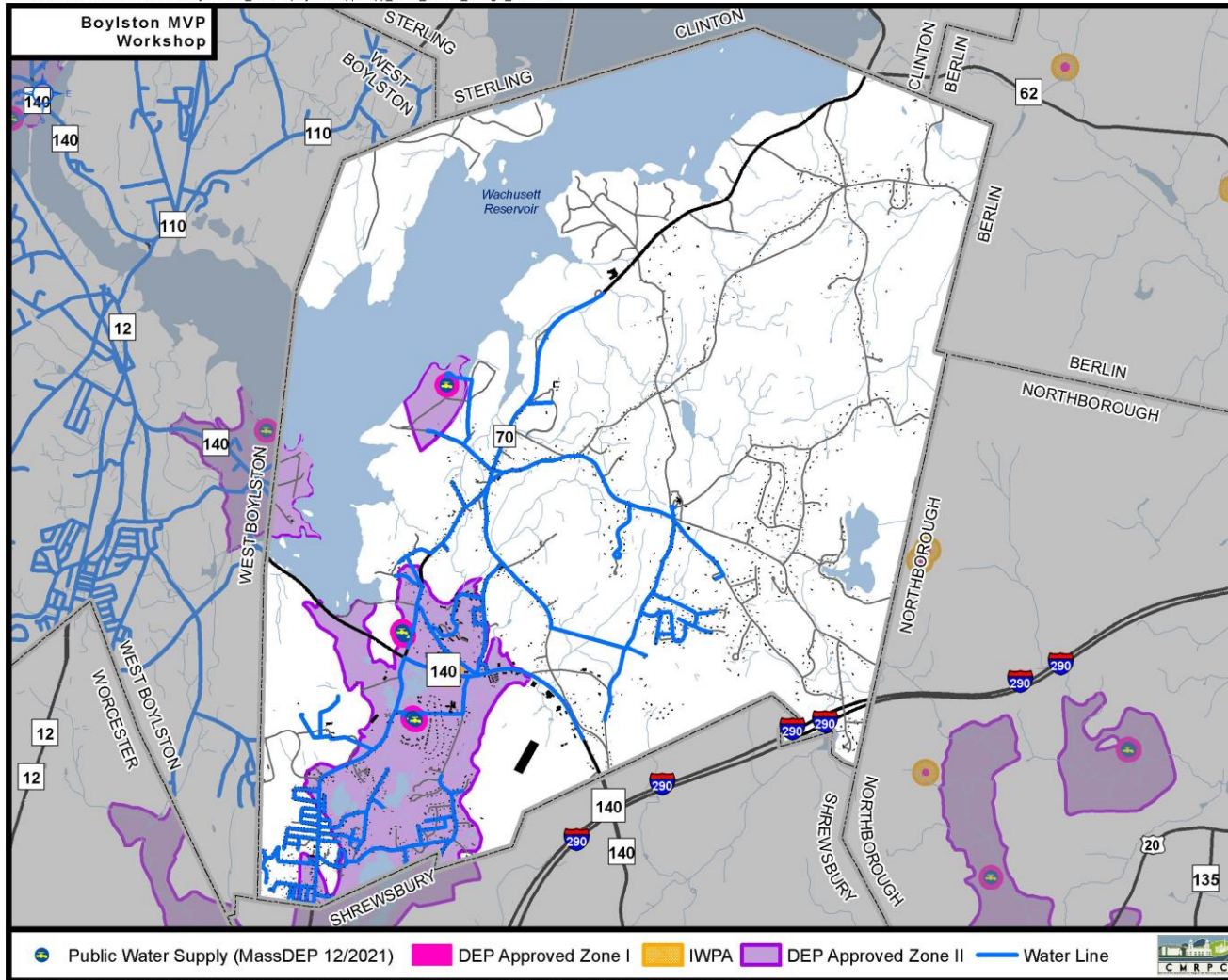


Annual Total Precipitation Nashua



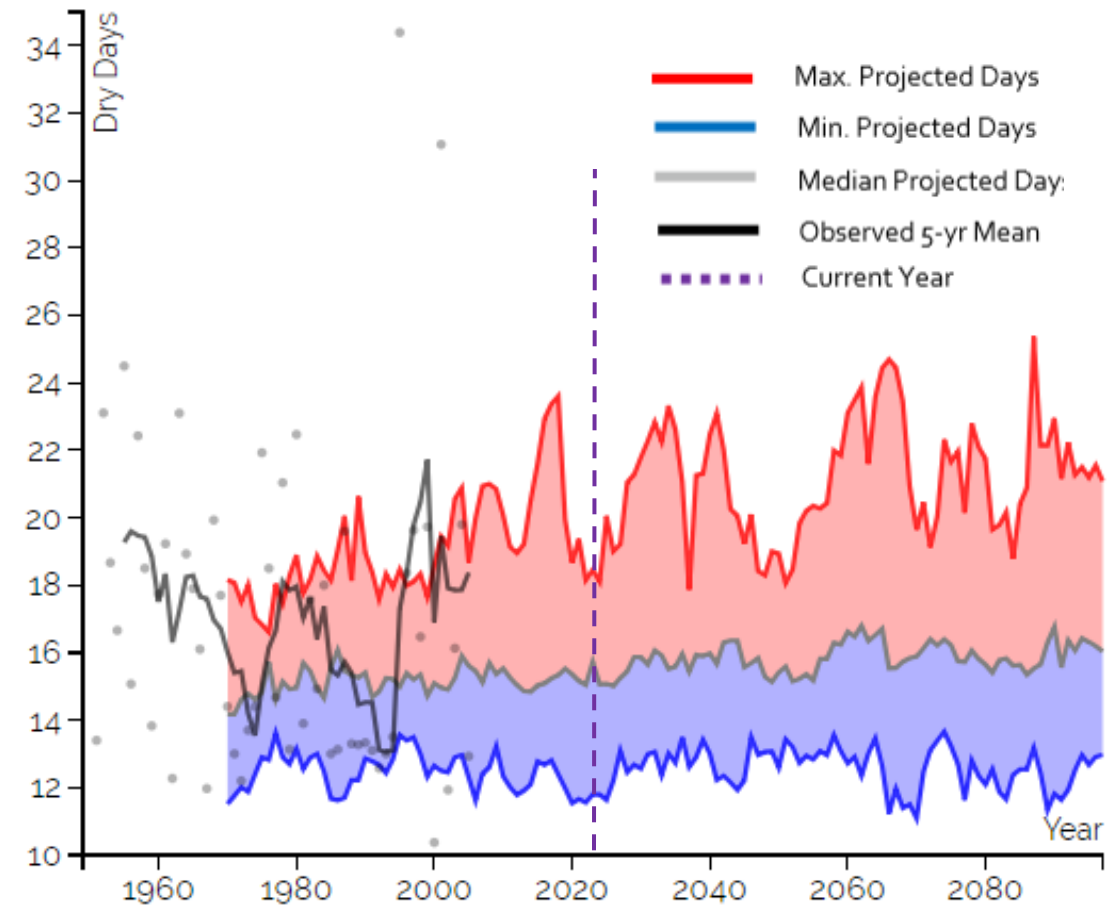
DROUGHT IMPACTS

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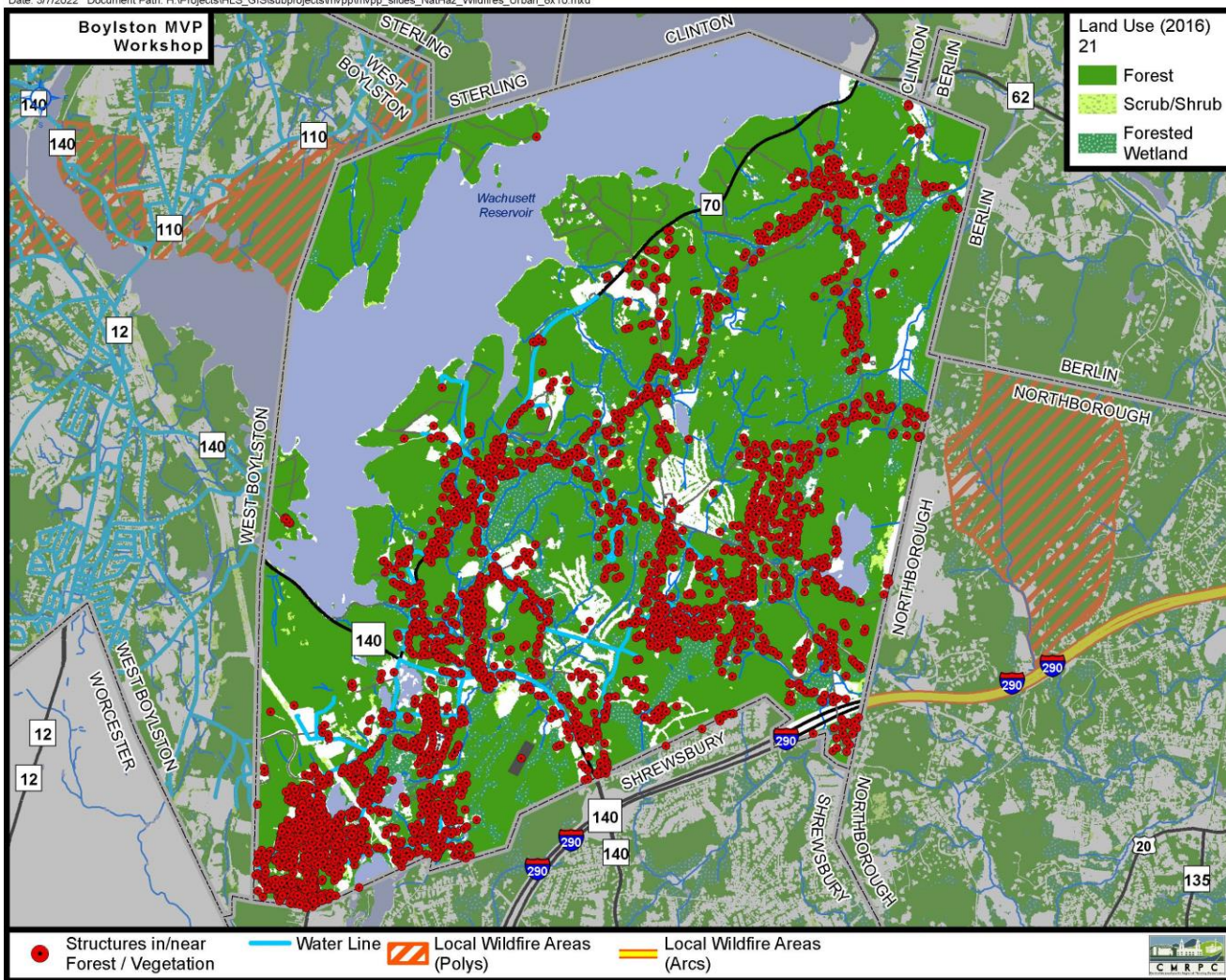
Source: Data provided by the Town of Boylston, CMRPC, MassDOT, MassGIS. Information depicted on this map is for planning purposes only.

Annual Consecutive Dry Days Nashua



HEAT IMPACTS

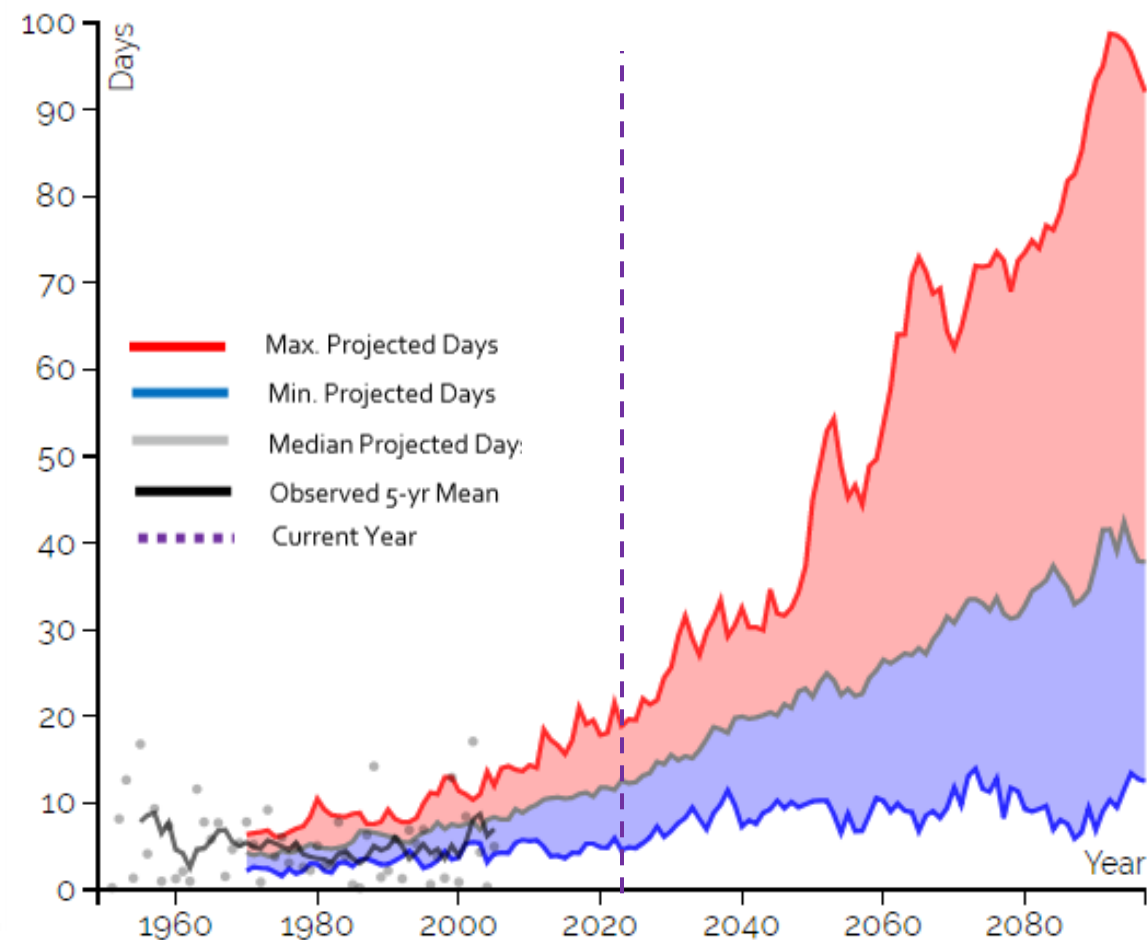
Date: 3/7/2022 Document Path: H:\Projects\HLS_GIS\subprojects\mvpp\mvpp_slides_NatHaz_Wildfires_Urban_8x10.mxd



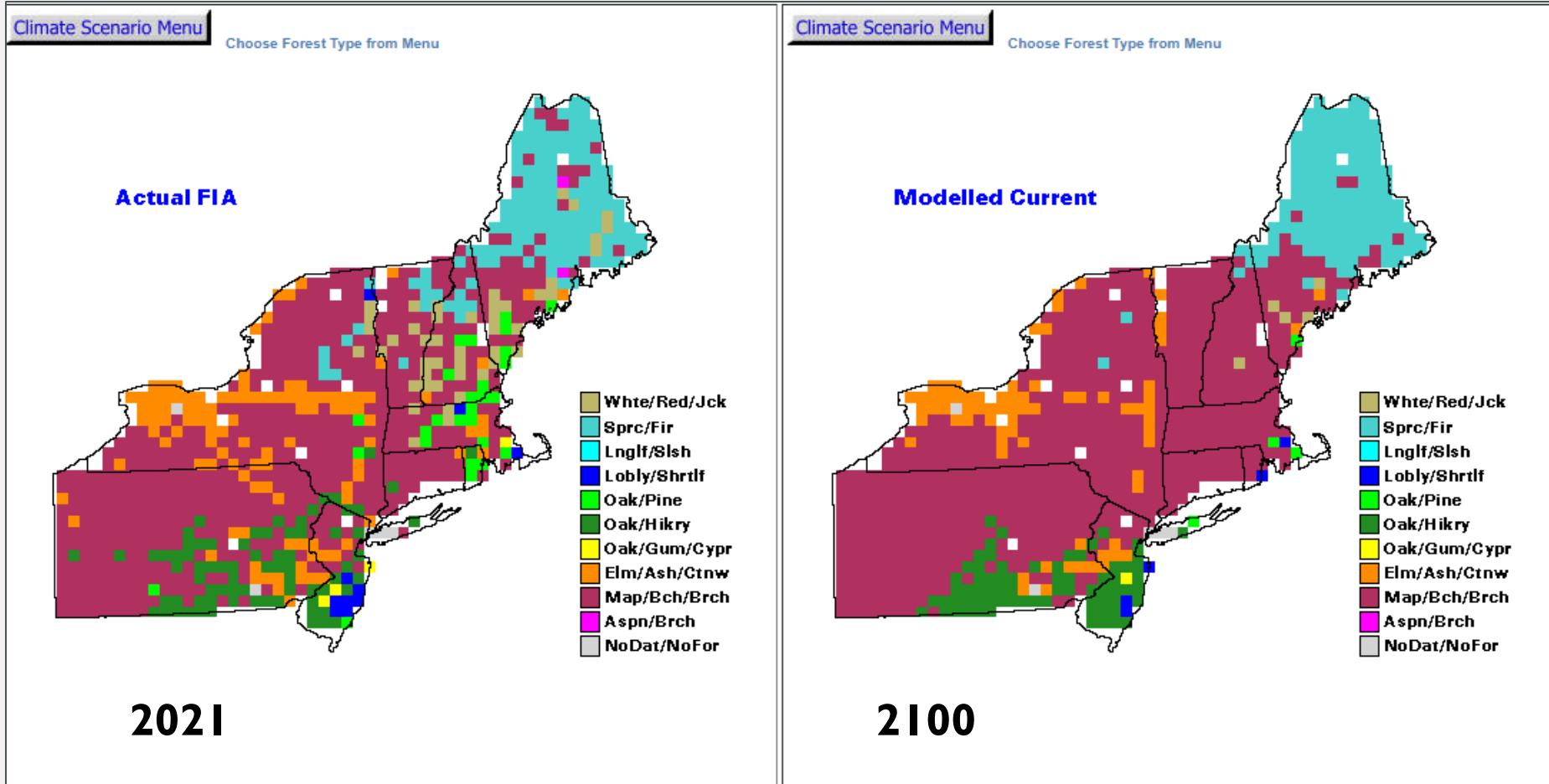
Source: Data provided by the town of Boylston, CMR.P.C., Mass Audubon, massDOT, MassGIS. Information depicted on this map is for planning purposes only.

Annual Days with Maximum Temperature Above 90°F

Nashua



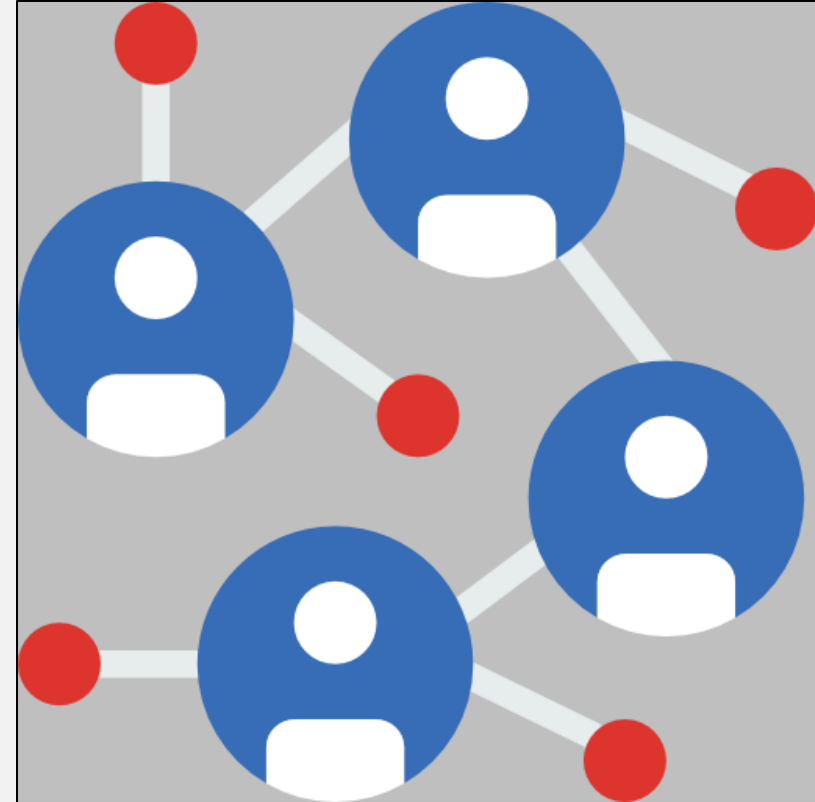
HEAT IMPACTS ON THE ENVIRONMENT



- Species expected to move north
- Diversity of species will likely decrease
- Likely increase in invasive species

BREAKOUT GROUPS

- 2 Breakout groups of 10 individuals
- 4 Focus Hazards
- 3 Focus Sections
- Tools and Resources
 - Matrix, Maps, HMP & Each Other




Icon made Prettyicons from Flaticon.com

THE MATRIX

Community Resilience Building Risk Matrix				www.CommunityResilienceBuilding.com					
<p>H-M-L priority for action over the <u>Short</u> or <u>Long</u> term (and <u>Ongoing</u>)</p> <p>V = Vulnerability S = Strength</p>				<p>Top Priority Hazards (tornado, floods, wildfire, hurricanes, earthquake, drought, sea level rise, heat wave, etc.)</p>				Priority	Time
Features	Location	Ownership	V or S					H - M - L	Short Long Ongoing
Infrastructural									
Societal									
Environmental									

STEP TWO: WHAT, WHERE, WHO AND VULNERABILITIES

Community Resilience Building Risk Matrix  www.CommunityResilienceBuilding.com

H-M-L priority for action over the Short or Long term (and Ongoing)
V = Vulnerability **S** = Strength

Top Priority Hazards (tornado, floods, wildfire, hurricanes, earthquake, drought, sea level rise, heat wave, etc.)

Features	Location	Ownership	V or S	Top 4 Hazards				Priority		Time	
								H-M-L	Short Long Ongoing		
Infrastructural											
Societal											
Environmental											

STEP TWO: WHAT, WHERE, WHO AND VULNERABILITIES




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Community Resilience Building Risk Matrix				www.CommunityResilienceBuilding.com					
<small>H-M-L priority for action over the Short or Long term (e.g.)</small> <small>V = Vulnerability S = Strength</small>				<small>Top Priority Hazards (tornado, floods, wildfire, hurricanes, earthquake, drought, sea level rise, heat wave, etc.)</small> <div>Top 4 Hazards</div>					
Features	Location	Ownership	V or S					Priority H-M-L	Time Short Long Ongoing
Infrastructural									
Dam									
Societal									
Senior Housing									
Environmental									
Wetlands									

Estimated Location

STEP TWO: WHAT, WHERE, WHO AND VULNERABILITIES

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Features	Location	Ownership	V or S	Top 4 Hazards				Priority	Time
								H-M-L	Short Long Ongoing
Infrastructural									
Dam									
Societal									
Senior Housing									
Environmental									
Wetlands									

Estimated Location

Public? Private? State?

STEP TWO: WHAT, WHERE, WHO AND VULNERABILITIES

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H-M-L priority for action over the Short or Long term (and Ongoing)
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Top Priority Hazards (tornado, floods, wildfire, hurricanes, earthquake, drought, sea level rise, heat wave, etc.)

Features	Location	Ownership	V or S	Top 4 Hazards				Priority	Time
								H - M - L	Short Long Ongoing
Infrastructural									
Dam									
Societal									
Senior Housing									
Environmental									
Wetlands									


Vulnerability or Strength

Estimated Location

Public? Private? State?



STEP THREE: ACTIONS, PRIORITY AND TIMELINE

Community Resilience Building Risk Matrix  www.CommunityResilienceBuilding.com

H-M-L priority for action over the Short or Long term (and Ongoing)
 V = Vulnerability S = Strength

Features	Location	Ownership	V or S	Top Prior Hazards (tornado, flood, wildfire, hurricane, earthquake, drought, sea level rise, heat wave, etc.)	Priority	Time
				Top 4 Hazards	H-M-L	Short Long Ongoing
Infrastructure						
Societal						
Environmental						

Completed

Nature Based Solutions

TABLE SUMMARIES

Community Resilience Building Risk Matrix



TABLE # 2

www.CommunityResilienceBuilding.org

Boylston #2

H-M-L priority for action over the Short or Long term (and Ongoing)
V = Vulnerability S = Strength

Top Priority Hazards (tornado, floods, wildfire, hurricanes, earthquake, drought, sea level rise, etc.)

Features	Location	Ownership	V or S	Description	Winter Storms (ice, snow)	Severe Storms (wind events, tornadoes)	Flooding (inland and coastal)	Extreme Heat/Drought	Priority H - M - L	Time Short Long Ongoing
Infrastructural										
Drainage & culverts	Route 70 culverts (French Brook)	State, town, subdivision HOAs for maintenance	V	Drainage may not be sized appropriately for frequency of 100 year floods. Back-up South of high school could be due to Beaver activity. People are nervous about home flooding	culvert and dam analyses; identify culvert locations;					
Beaver Activity	Route 70	State, town	V/S	affecting culverts. Styles Road culverts are not big enough, beaver activity has increased. Cross Street. Beaver plan in place for new development around FedEx facility. Beavers can help wetlands and hydration in forests as we move forward; issues in brooks and ponds in town, property owners adjacent to streams;	town-wide beaver management program; mitigation measures to remove blockages/structural damages fr					
Dead trees	Route 70	State	V	potential to take out power lines and block roads during storms. Diamond Hill Ave, oak trees affected by gypsy moths. Could affect light department. Highway dept. limited budget (10-15k) to take down trees for the year. MassDOT has contract to remove dead trees with certain buffers from electric wires	work with umass amherst forestry dept; forest mgmt plan (where did Worcester \$ come from for there plan?); youth initiatives; boylston version of what Worcester Tree Initiative; towerhill planting-type program?; tree stewardship; DCR help - flow mapping, water quality testing, etc.,;					
septic	Oak Hill Lane subdivision; FedEx facility and surrounding parcels set to develop.	Private	V	New locations having hard time finding locations for septic tanks- easily developed sites have already been developed	grants for surveying failing septic areas, Title V upgrades; septic loan program; update septic systems old buildings;					
Dams	Rocky Pond, Camp Harrington Pond (Rt 70 & 140), Millroad Circle (Sewall Pond to Newton Pond)	Private & State for Wachusett	V/S	6 dams in Boylston, Wachusett dam moved from high hazard to good condition- potential to flood Rt 70 and 62 if overflowed on Clinton line (no public infrastructure would be affected) Office of dam safety required trees moved, moved to good condition	dam assessments					
Water System	(on map)	Water District & private wells	V/S	Good supply, good quality, old infrastructure. 2 wells on Rt 70 may be vulnerable to salt- potential to reduce salt use on Route 12. Half of town on water district, half on individual wells. Vulnerable wells near roadways from road salt. Vulnerability with nitrate levels for wells that have subdivisions nearby- need to change behavior. No plans to expand public water	analyses/assessment for municipal wells in town in flood/wetland areas; water quality testing (Blackstone					
Municipal Light Department	town wide			very good department. Receptive to issues such as tree limb repairs. Work closely with Highway department to take down issue trees & get ahead before winter storms.	solar installation; work with town on dead trees and removal					
Roadways				Stiles road flooding would be dangerous for resident access in/out- current beaver problem there on low point. Current plan has been working for road maintenance. Roadways are in decent shape. Central Street in need of paving, will be costly. Highway super does great job of seeing which roads	chapter 90 funds; need more funding from state; arpa funding; identify projects;					



GROUP VOTE

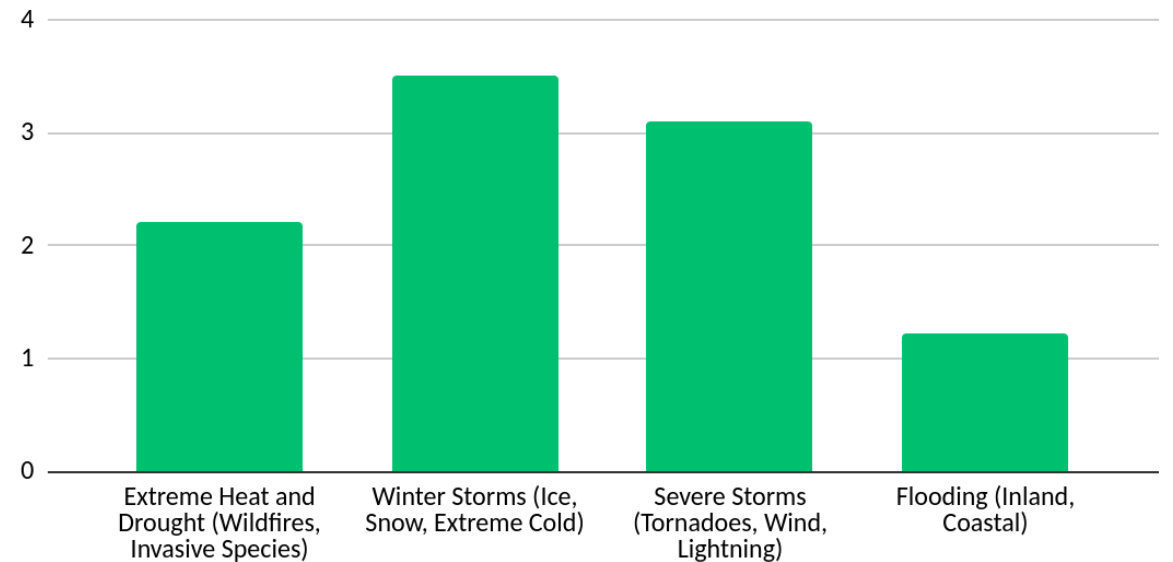
Boylston Municipal Vulnerability Preparedness Program

Top Priority Actions Survey

Thank you for participating in Boylston's MVP Workshop! Based on the action items that you came up with during the workshop, we have developed the survey below. This survey will help us identify the top priority actions that Boylston should take in order to become more resilient. Please complete the survey by **Wednesday, April 27, 2022**. The results of this survey will be described in the report and discussed during the listening session.

Thank you in advance for your help with this next step!

Please rank the following hazards in order from most concern (1) to least concern (4):



WHAT DID THE GROUP FIND?

INFRASTRUCTURE CONCERNS



Culverts



Roadways



Utility Systems

INFRASTRUCTURE STRENGTHS



Stormwater
Management



Municipal Facilities



Water Supply

INFRASTRUCTURE ACTIONS

HIGH PRIORITY



Identify resources to improve radio coverage and explore regionalization potential to be eligible for more funding opportunities.



Perform a feasibility study for the relocation and construction of a fire, police, and senior community center facility. Utilize a climate resilient design for this facility.



Perform a town-wide culvert assessment to identify the location and functionality of existing culverts. Utilize CMRPC services and DER grants to aid in this effort.



Develop a forest management plan to reduce the fire load. Continue to collaborate with DCR on forestry management and hunting practices.

SOCIETAL CONCERNS



Emergency
Preparedness



At-Risk Populations



Access

SOCIETAL STRENGTHS



Town Boards and
Departments



Local Organizations
& Groups



Planning and Policies

SOCIETAL ACTIONS

HIGH PRIORITY



Identify needs and resources to improve the Town's potential shelter locations.

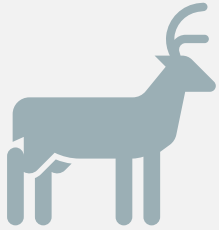


Improve advocacy and resilience through continued collaboration with local stakeholders, surrounding communities, regional organizations, and state organizations/State Representatives.



Adopt the Community Preservation Act. Develop an education campaign to help with adoption by promoting the benefits of the CPA program.

ENVIRONMENTAL CONCERNS



Nuisance Species

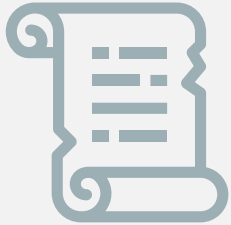


Invasive Species



Water Quality and
Condition

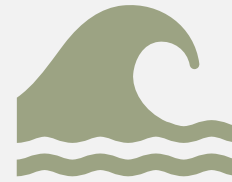
ENVIRONMENTAL STRENGTHS



Environmental
Policy



Forests and Parks



Water Resources

ENVIRONMENTAL ACTIONS

HIGH PRIORITY



Develop a prioritization plan for acquiring and/or protecting open space parcels.



Construct beaver deceivers in areas with high beaver activity to prevent damming that leads to flooding risks.



Implement a tree removal and planting program, utilizing native, drought-resistant, and pest-resistant tree species.

NEXT STEPS FOR BOYLSTON



Finalize draft report with assistance from CMRPC



Final report submitted to EOEEA by June 30, 2022



Boylston receives “MVP Community” certification



Annual reporting by Core Team



Develop and apply for MVP Action Grants

ACTION GRANTS

Action Grants were launched this Spring

Up to \$3 million for an individual community

Up to \$5 million for regional projects

One year grant cycle (typically) July 1st- June 30th

25% Match - Cash or In-kind (Non-State Funds)

www.mass.gov/municipal-vulnerability-preparedness-mvp-program

<https://resilientma.org/mvp/>



Questions and Comments?

CONTACT

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Environmental Planner

Central Massachusetts Regional Planning Commission



Thank you!

